140th Wing Safety Monthly Safety Spotlight

July 2015 Preventing Heat-Related Illness and Injury

- Safety Discussion Topics
 - Know the hazards
 - Know the signs and how to react heat cramps
 - Know the signs and how to react heat exhaustion
 - Know the signs and how to react heat stroke
 - Avoiding heat stress at work
 - Avoiding heat stress at home
 - Never leave a child in a vehicle!
 - Know your resources

Preventing Heat-Related Illness and Injury

Know the Hazards

- Heat injuries happen when the body's natural methods for coping with heat are overwhelmed
- Heat Illness and injury can affect all ages and levels of fitness
- Active physical exertion and/or hot weather conditions can trigger these dangerous physical responses
- You can be exposed to heat illness and injury indoors and outdoors, at home or at work
- Heat illness can affect people working in hot environments or wearing layers of protective clothing, even during cool weather
- Heat illnesses can be relatively mild such as heat rash or heat cramps, or serious such as heat exhaustion and heat stroke
- The onset and sequence of the symptoms can be subtle; you may not realize you're becoming ill
- These serious conditions can easily be avoided by simple avoidance measures, and knowing how to spot the earliest symptoms



Preventing Heat-Related Illness and Injury

Know the Signs and How to React

HEAT CRAMPS: Learn to recognize the symptoms in yourself and others so you can take appropriate action. Your quick response can keep the heat illness from becoming more serious.

- Heat Cramps Symptoms
 - Painful cramps in the legs and/or stomach
 - Caused by loss of the body's salt and moisture due to profuse sweating
 - Heat cramps can also be symptoms of heat exhaustion



- Have the person rest quietly in a cool, shaded area
- It is vital to rehydrate the person; have them drink cool (not ice-cold) water or a sports drink in small amounts at a time
- Do not use drinks containing caffeine, alcohol or large amounts of sugar
- Massage the cramping leg muscles and gently stretch them



Preventing Heat-Related Illness and Injury

Know the Signs and How to React

HEAT EXHAUSTION: A person experiencing heat exhaustion may become and may not know he or she is becoming seriously ill. It is vital to provide first aid immediately to prevent heat stroke.



- Profuse sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea

- Pale or flushed complexion
- Slightly elevated body temperature
- Clammy, moist skin
- Rapid, shallow breathing



- Provide first aid immediately
- Have the person rest and rehydrate (as with heat cramps)
- Cool the person by wetting their skin and clothing with water and fanning them
- If the person refuses water, vomits or loses consciousness, call 9-1-1 immediately
- Left untreated, heat exhaustion can quickly progress to heat stroke, a life-threatening condition



Preventing Heat-Related Illness and Injury

Know the Signs and How to React

HEAT STROKE: The victim's body temperature can quickly rise to 107 degrees as the body's vital systems are disabled.

- Heat Stroke Symptoms
 - Vomiting
 - Rapid, weak pulse
 - Rapid, shallow breathing

- High body temperature
- Skin that is dry, hot and red
- Confusion, hallucinations

- Heat Stroke How to React
 - Heat stroke is an emergency! Emergency services should be called at once
 - Have the person rest lying down in a cool area until help arrives
 - Move him or her to an air-conditioned environment if possible
 - Have them drink cool water in small amounts.
 - Follow the process for cooling the person as with heat exhaustion. If possible, wrap the person in cool, wet sheets and fan him or her to accelerate cooling.
 - HEAT STROKE CAN BE FATAL Call 9-1-1 immediately!

Preventing Heat-Related Illness and Injury

Avoiding Heat Stress at Work

- Planning: Develop and implement written procedures for complying with Heat Illness Prevention. Use Risk Management to protect your employees.
- Training: Train all employees and supervisors about heat illness prevention
- Water: Provide enough fresh water so that each employee can drink at least one quart per hour, and encourage them to do so
- Shade: Provide access to a shaded area to prevent or recover from heat illness and where employees can take rest break



Preventing Heat-Related Illness and Injury

Avoiding Heat Stress at Home

- Learn about and watch for the symptoms of heat illnesses, and take proactive steps to protect yourself, your family and others
 - Monitor yourself and others anytime you are active in very hot weather or involved in strenuous exercise that causes heat to build up
 - In hot conditions provide a cool, shaded rest area and plenty of water; insist on regular rest and hydration breaks
- When you must be active on hot days:
 - Wear light-colored, lightweight and loose fitting clothing
 - Use sunblock, sun hats and other measures to prevent sunburn
 - Drink water gradually throughout the day, even when you are not thirsty
 - Schedule heavy activity in the cooler morning and evening hours
 - Scale back or slow down your workout regimen during very hot weather
- During periods of unusually hot weather, check on older relatives and neighbors and help them to shelters if needed

Preventing Heat-Related Illness and Injury

Never Leave a Child in a Vehicle!

- The temperature inside car parked in the sun on a hot day can reach
 170 degrees in as little as ten minutes.
- Child fatality can occur even if the car's windows are partially rolled down, it's parked in the shade or on mild (60-70 degree) days.
- It is illegal to leave children in an unattended car. Common-sense safety practices can prevent these tragic deaths.



- Prevention measures include:
 - Keep a large stuffed animal in the child safety seat. When the child is riding
 in the seat, put the toy in the front seat with you. Even if the child falls
 asleep, the toy is a reminder that he or she is in the car.
 - Leave your purse, backpack or other necessary items near the child when you take off. To retrieve them when you arrive at your destination, you will automatically see the child in the car seat.
 - Leave parked cars locked and keep the trunk closed. Children play in parked vehicles and sometimes enter the car or trunk and cannot get back out.
 - If you see a child alone in a car, contact 9-1-1 immediately.